**Appendix B**

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|  |  |  | References |
| *Locomotion mode* | Walker | Jumper | Astley, 2016; Emerson, 1979; Taigen et al., 1982 |
| *Physiological parameters* |  |  |
| Endurance | high | low | Putnam and Bennett, 1981; Zug, 1985 |
| Aerobic scope | high | low | Bennett and Licht, 1973; Carey, 1979 |
| *Cellular characteristics* |  |  |
| Muscle fiber type | Same phenotype (FOG/FG fibers) | Lutz and Lieber, 2000; Putnam and Bennett, 1983 (but see Sperry, 1981) |
| Fatigue resistance | high | low | Chadwell et al., 2002; Stary et al., 2004; Vydeska-Chichova et al., 2005 |
| ATP production | Mitochondrial OXPHOS | Glycolytic pathways | Desprat et al., 2017; Lutz and Rome, 1994; Navas et al., 2008; Putnam and Bennett, 1983 |
| Major enzymes activities | CS; COX | LDH; PFK | Navas et al., 2008; Putnam and Bennet, 1983 ; Seebacher and Franklin, 2011; Rogers et al., 2007 |

**Table 1: main physiological characteristics of anurans, depending on the two major locomotion modes.** Walking anurans are schematically described as endurance performers, with high aerobic capacities, due to a mainly oxidative metabolism, whereas jumper species are powered by anaerobic ATP production. Interspecific dispersal ability may be directly linked to locomotion mode, and intraspecific dispersal performances are more likely due to an enhanced metabolic efficiency. CS: Citrate synthase; COX: Cytochrome-C-oxidase; FG: fast glycolytic; FOG: fast oxidative glycolytic; LdH: Lactate dehydrogenase; OXPHOS: Oxidative phosphorylation; PFK: Phosphofructokinase



**Figure 1: schematic overview of metabolic pathways and associated key-enzymes likely used by amphibians during locomotion.** CS: Citrate synthase; COX: Cytochrome-C-oxidase; LdH: Lactate dehydrogenase; OXPHOS: Oxidative phosphorylation; PFK: Phosphofructokinase.

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